

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

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Claim 1 (currently amended): ~~A coolant which is pre-diluted and does not require use of any additional water which provides effective metal corrosion inhibition and retains efficient mechanical seal function, comprising as its base component a member selected from the group consisting of deionized water~~ A method of cooling and internal-combustion engine system comprising deionized water free of corrosive ions and scale forming ions and having a specific resistance of at least  $10 \times 10^4 \Omega \cdot \text{cm}$  or higher with corrosive ions and scale forming ions having been removed, ethylene glycol aqueous solution prepared using such deionized water between approximately 15 and 50 percent by weight ethylene glycol, and  $[(,)]$  or propylene glycol aqueous solution prepared using such deionized water in or as the base component in a, and wherein said pre-diluted coolant for direct use in internal-combustion engine systems, wherein said pre-diluted coolant is free of conventional water and providing said pre-diluted coolant to an internal combustion engine comprises between approximately 50 and 85 percent by weight said deionized water.

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Claim 2 (currently amended): ~~A pre-diluted coolant method~~ according to claim 1, wherein said base component contains at least one other ingredient, in an effective amount or amounts, selected from the metal inhibitor group consisting of alkali metal salts and amine salts of phosphoric acids, aromatic carboxylates including benzoic acid and alkali metal salts, ammonium salts and amine salts thereof, alkybenzoic acids having a chemical structure  $R-C_6H_4-COOH$  (R is a C1-C5 alkyl group) and alkali metal salts, ammonium salts and amine salts thereof, alkoxybenzoic acids having a chemical structure  $RO-C_6H_4-COOH$  (R is a C1-C5 alkyl group) and alkali metal salts, ammonium salts and amine salts thereof, cinnamic acids, alkylcinnamic acids and alkoxy cinnamic acids having a chemical structure  $R-C_6H_4-CH=CHCOOH$  (R is a C1-C5 alkyl or alkoxy group) and alkali metal salts, ammonium salts and amine salts thereof, aliphatic carboxylates carboxylates including C6-C12 aliphatic monobasic acids and C6-C12 aliphatic dibasic acids and their alkali metal salts, ammonium salts and amine salts, aromatic polyvalent

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4 14 24  
5 15 25  
6 16 26  
7 17 27  
8 18 28  
9 19 29  
10 20 30  
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carboxylic acids, molybdates, tungstates, vanadates, alkali metal salts of nitric acid, alkali metal salts of silicic acids, alkali metal salts of boric acids, alkali metal salts of nitrous acid, triazole hydrogencarbonate, mercaptobenzothiazole, strontium compounds, 2-phosphonobutane-1,2,4 tricarboxylic acid and alkali metal salts thereof.

Claim 3 (currently amended): A ~~pre-diluted coolant~~ method according to claim 1 or 2, wherein alkali metal salts and amine salts of phosphoric acids, alkali metal salts of silicic acids, alkali metal salts of boric acids, alkali metal salts of nitrous acid, aliphatic monobasic acids and aliphatic dibasic acids are excluded and not contained in said base component, wherein at least one of 0.1-5.0 wt.% of p-tert butyl benzoic acid and alkali metal salts thereof, and at least one of 0.01-1.0 wt.% of triazoles are contained in said base component.

Claim 4 (currently amended): A ~~pre-diluted coolant~~ method according to claim 1 or 2, wherein 0.01-8.0 wt.% of alkylbenzoic acids having a chemical structure  $R-C_6H_4-COOH$  (R is a C1-C5 alkyl group) or their alkali metal salts, ammonium salts or amine salts are contained in said base component.

Claim 5 (currently amended): A ~~pre-diluted coolant~~ method according to claim 1 or 2, wherein 0.01-8.0 wt.% of alkoxybenzoic acids having a chemical structure  $RO-C_6H_4-COOH$  (R is a C1-C5 alkyl group) or their alkali metal salts, ammonium salts or amine salts are contained in said base component.

Claim 6 (currently amended): A ~~pre-diluted coolant~~ method according to claim 1 or 2, wherein 0.01-8.0 wt.% of cinnamic acids, alkylcinnamic acids or alkoxycinnamic acids having a chemical structure  $R-C_6H_4-CH=CHCOOH$  (R is H, or a C1-C5 alkyl or alkoxy group), or their alkali metal salts, ammonium salts or amine salts are contained in said base component.

Claim 7 (currently amended): A ~~pre-diluted coolant~~ method according to claim 1 or 2, wherein

alkali metal salts and amine salts of phosphoric acids, alkali metal salts of silicic acids, alkali metal salts of boric acids and alkali metal salts of nitrous acid are excluded and not contained in said base component, wherein 0.1-4.0 wt.% of at least one of sebacic acid and alkali metal salts thereof, and 0.1-3.0 wt. % of at least one of p-tert butylbenzoic acids and alkali metal salts thereof are contained in said base component.

Claim 8 (currently amended): A ~~pre-diluted coolant~~ method according to claim 1 or 2, wherein phosphates, amine salts, silicates, borates and nitrites are excluded and not contained in said base component, wherein 0.1-0.4 wt.% of at least one of sebacic acid and alkali metal salts thereof, 0.1-3.0 wt.% of at least one of undecanoic diacid and dodecanoic diacid and their alkali metal salts, and 0.01-1.0 wt.% of at least one of triazoles are contained in said base component.

Claim 9 (currently amended): A ~~pre-diluted coolant~~ method to claim 1 or 2, wherein 0.02-5.0 wt.% of at least one of C6-C12 aliphatic monobasic acids and their salts, and 0.02-5.0 wt.% of at least one of alkoxybenzoic acids having a C1-C5 alkoxy group and their salts are contained in said base component.

Claim 10 (currently amended): A ~~pre-diluted coolant~~ method according to claim 9, further containing 0.1-1.0 wt.% of at least one of triazoles.

Claim 11 (currently amended): A ~~pre-diluted coolant~~ method according to claim 9, wherein amine salts and borates are excluded and not contained.

Claim 12 (currently amended): A ~~pre-diluted coolant~~ method according to claim 1 or 2, wherein 0.02-5.0 wt.% of at least one of hexanoic acid and heptanoic acid and their salts, and 0.02-5.0 wt.% of at least one of alkylbenzoic acids having a C1-C5 group and salts thereof are contained in said base component.

Claim 13 (currently amended): A ~~pre-diluted coolant~~ method according to claim 12, further containing 0.01-1.0 wt.% of at least one triazoles.

Claim 14 (currently amended): A ~~pre-diluted coolant~~ method according to claim 12 or 13, wherein amine salts and borates are excluded and not contained.

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Claim 15 (currently amended): A ~~pre-diluted coolant~~ method according to claim 1 or 2, wherein 0.02-5.0 wt.% of at least one of C6-C12 aliphatic monobasic acids and salts thereof, and 0.02-5.0 wt.% of at least one of cinnamic acids, alkylcinnamic acids and alkoxy~~cinnamic~~ acids having a chemical structure  $R-C_6H_4-CH=COOH$  (R is a C1-C5 alkyl group or alkoxy group) and their alkali metal salts, ammonium salts and amine salts are contained in said base component.

Claim 16 (currently amended): A ~~pre-diluted coolant~~ method according to claim 15, further containing 0.01-1.0 wt.% of at least one of triazoles.

Claim 17 (currently amended): A ~~pre-diluted coolant~~ method according to claim 15 or 16, wherein amine salts and borates are excluded and not contained.

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Claim 18 (currently amended): A ~~pre-diluted coolant~~ method according to claim 1 or 2, wherein 0.01-8.0 wt.% of at least one of p-toluic acid salts and 0.002-1.0 wt.% of at least one of molybdates.

Claim 19 (currently amended): A ~~pre-diluted coolant~~ method according to claim 18, further containing 0.01-8.0 wt.% benzoates.

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Table 1

Claim 20 (currently amended): A ~~pre-diluted coolant~~ method according to claim 18, further containing 0.01-8.0 wt.% of p-tert butylbenzoic acid.

Claim 21 (currently amended): A ~~pre-diluted coolant~~ method according to claim 18, wherein nitrites are excluded and not contained.

Claim 22 (currently amended): A ~~pre-diluted coolant~~ method according to claim 1 or 2, wherein 0.01-8.0 wt.% of at least one of benzoates, 0.01-8.0 wt.% of p-tert butylbenzoic acid and 0.002-1.0 wt.% of at least one of molybdates are contained in said base component.

Claim 23 (currently amended): A ~~pre-diluted coolant~~ method according to claim 22, further containing 0.01-8.0 wt.% of at least one of p-toluic acid salts.

Claim 24 (currently amended): A ~~pre-diluted coolant~~ method according to claim 22 or 23, wherein nitrites are excluded and not contained. X npe

Claim 25 (currently amended): A ~~pre-diluted coolant~~ method according to claim 1 or 2, wherein 0.01-8.0 wt.% of at least one of benzoates and 0.01-8.0 wt.% of at least one of p-toluic acid salts are contained in said base component.

Claim 26 (currently amended): A ~~pre-diluted coolant~~ method according to claim 25, further containing 0.01-8.0 wt.% of p-tert butylbenzoic acid.

Claim 27 (currently amended): A ~~pre-diluted coolant~~ method according to claim 25 or 26, wherein nitrites are excluded and not contained. X npe

Claim 28 (currently amended): A ~~pre-diluted coolant~~ method according to claim 1 or 2, wherein 0.00002-0.1 wt.% of at least one of strontium compounds is contained in said base component.

Claim 29 (currently amended): A ~~pre-diluted coolant~~ method according to claim 1 or 2, containing 0.01-3.0 wt.% of at least one of phosphoric acids and salts thereof, 0.001-0.5 wt.% of at least one momolybdic acid, tungstic acid and vanadic acid and their salts, and 0.001-0.5 wt.% of at least one of triazoles and salts thereof.

Claim 30 (currently amended): A ~~pre-diluted coolant~~ method according to claim 1 or 2, wherein 0.002-1.0 wt.% of at least one of 2-phosphonobutane-1,2,4 tricarboxylic acids and aqueous solutions thereof, at least one of phosphates, at least one of nitrates, at least one of benzoates and at least one of triazoles are contained in said base component. *Table 1*

Claim 31 (currently amended): A ~~pre-diluted coolant~~ method according to claim 30, wherein 0.002-2.0 wt.% of at least one of nitrates, 0.02-6.0 wt.% of at least one of benzoates, and 0.01-2.0 wt.% of at least one of triazoles are contained in said base component.